

ABSTRACT OF THE DISCLOSURE

A ferroelectric material in which the refractive index change can be induced by irradiation with light at two different wavelengths without performing a reduction treatment or doping impurities. The ferroelectric material of the invention in which the refractive index change is induced by irradiation with light at two different wavelengths is a lithium tantalate single crystal with the composition of $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4966$ to 0.4995 . Preferably, the ferroelectric material is a lithium tantalate single crystal with the composition of $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4974$ to 0.4989 . Preferably, the infrared absorption coefficient in the [OH] stretching mode falls within a range of 0 cm^{-1} to 0.15 cm^{-1} (0 cm^{-1} and 0.15 cm^{-1} are included in the range).